ECB-0004 09/676,875

containing gas or an we must wherein the composition of the catalyst utilized varies according to the stripping gas. PECENED TO 1700 TO

IN THE CLAIMS

Please cancel claim 8.

Please enter these amended claims 1, 4 – 7, 12 and 13.

A method for decreasing sulfur levels in a mercaptan sulfur containing 1. olefinic naphtha feedstream comprising the steps of passing said mercaptan sulfur containing olefinic naphtha feedstream over a fixed bed catalyst in a three phase, gas, liquid, solid, system in the presence of a stripping gas, for a time and temperature and pressure sufficient to decompose at least a polition of said mercaptans to produce olefins H₂S, as an off gas, and a hydrocarbon product stream having decreased amounts of mercaptan sulfur from said H₂S and said stripping gas and wherein said stripping gas is a gas stream comprising hydrogen, said fixed catalyst bed comprises (a) a non-reducible metal oxide or (b) a Group VIIIB metal promoted Group VIB catalyst, and wherein said stripping gas is an inert gas, said fixed bed catalyst comprises a Group VIIIB metal promoted Group VIB catalyst.

The method of claim 2 wherein when said stripping gas is a gas stream comprising hydrogen and said catalyst is a Group VIIIB promoted Group VIB catalyst, said stripping gas comprises no more than ½ mole % hydrogen sulfide and no more than 50 mole % hydrogen.

The method of claim 1 wherein said mercaptan sulfur containing olefinic naphtha feedstream is a hydrodesulfurized feedstream.

The method of claim 1 wherein said method includes a 6. hydrodesulfurization step to produce said mercaptan sulfur containing olefinic naphtha feedstream.

The method of claim 6 wherein said hydrodesulfurization step is a selective hydrodesulfurization step wherein sulfur is removed without substantially saturating olefins and without substantially changing the octane number.

The method of claim 1 wherein said mercaptan sulfur containing olefinic naphtha feedstream contains less than 30 ppm of non-mercaptan sulfur.

13. The method of claim 1 wherein said mercaptan sulfur containing olefinic naphtha feedstream contains less than 30 ppm of non-mercaptan sulfur and greater that 30 ppm of mercaptan sulfur.

REMARKS

Applicants, by this communication, have canceled claim 8 since the feedstream is now defined as a naphtha feedstream. Applicants have also amended claims 1, 4 and 7. Claims 1 and 4 have been amended by requiring that the stripping gas, other than the inert gas be a gas stream comprising hydrogen. This amendment was made at the suggestion of the Examiner and support for this amendment can be found in the first paragraph on page 6 of the instant specification. Claim 1 was also amended by limiting the feedstream to an olefinic naphtha stream. Support for this can be found in the second paragraph on page 6 of the instant specification. Claim 7 gas been amended by deleting the term "SCANfining" and inserting in place thereof selective hydrodesulfurization wherein sulfur is removed from the feedstock with little olefin saturation and octane loss. Support for this can be found in the third full paragraph on page 1 of the instant specification.

Objection to the Specification

The specification has been objected to because the Examiner believes that the Abstract of the Disclosure is improper because it does not include steps of the claimed